

## Data Sheet:



# M-Cable Tag

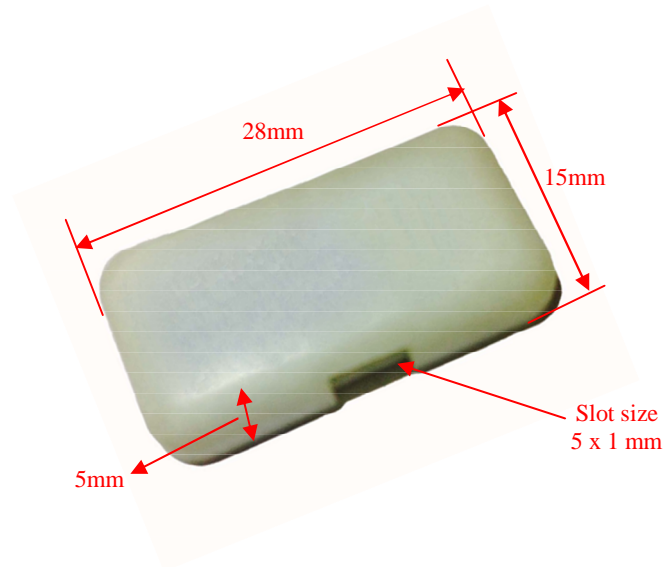
### FEATURES

- M-Cable tag is a **high temperature** tag & is especially designed for applications and processes involving high temperatures.
- Operates effectively with a good read range, especially when attached to metal.
- Rugged construction for high durability in harsh environments.
- Can be attached with a Cable tie through a slot provided.
- Flexible Read/Write Range (reader dependant).

### APPLICATIONS

- Used in high temperature applications like boilers and engines identification
- Used in asset tracking applications such as Equipment, Parts, Containers, railway and warehousing solutions.
- Factory automation, Automotive & Security purpose.

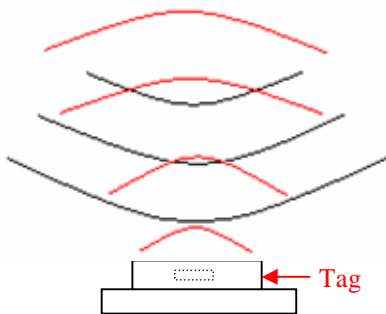
|                     |                                      |                                    |
|---------------------|--------------------------------------|------------------------------------|
| Chip Type:          | Alien Higgs 3 EPC Class 1 Gen 2      |                                    |
|                     | EPC 96 bit extendable up to 480 bits |                                    |
|                     | User Memory512 bit                   |                                    |
|                     | Data retention of 50 years           |                                    |
|                     | Write endurance 100.000 cycles       |                                    |
|                     |                                      |                                    |
| Mechanical:         | Dimension                            | 28 x 15 x 5mm                      |
|                     | Slot Size                            | 5 x 1 mm                           |
|                     | Material                             | High Temp. plastic                 |
|                     | Colour                               | Off White                          |
|                     | Weight                               | 3.1 g                              |
|                     |                                      |                                    |
| Electrical:         | Operating Frequency                  | 865-868MHz                         |
|                     | Operating mode                       | Passive (battery-less transponder) |
|                     |                                      |                                    |
| Ingress Protection: | IP68                                 |                                    |
|                     |                                      |                                    |
| Thermal:            | Storage Temp.                        | -40°C to +120°C                    |
|                     | Operating Temp.                      | -40°C to +85°C                     |
|                     |                                      |                                    |
| Part Number:        | 390V1                                |                                    |



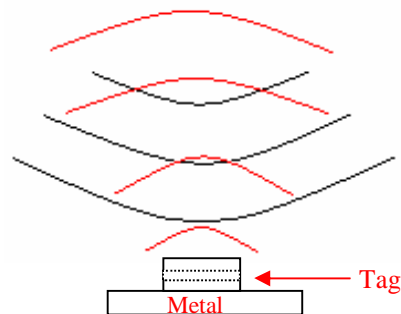
## Tag Placement

- ✚ M-Cable tag is polarized perpendicular to TTF logo.
- ✚ Place the tag in such a way that most of its bottom area comes in direct contact with metal.
- ✚ Ensure that there is no hindrance between the tag and the reader antenna.
- ✚ Reader antenna should be parallel to the tag length as shown in below figure:

### Correct way

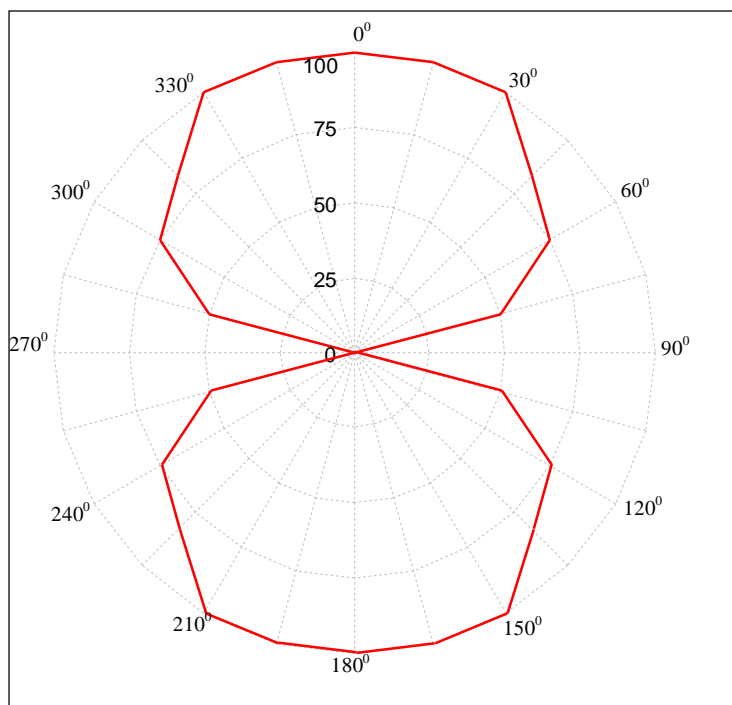


### Wrong way

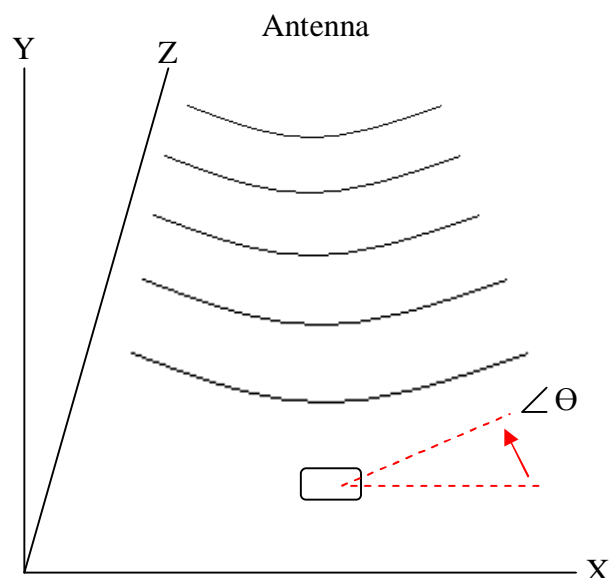


- ✚ Tag can be attached either through cable tie or an Adhesive tape.

## M-Cable Tag Angular Sensitivity (Relative Read Range vs. Orientation)



Read range (in percent) at various angle.



Tag is rotated in the X-Y plane about the z axis